EnGenius®

DATASHEET

ECB3500

Wireless Long Range Multi-function 7+1 AP

2.4GHz Super G 108Mbps 7+1 Modes EIRP 2000mW

Package Contents

- 1* Wireless Long range - multi-function 7+1 AP (ECB3500)
- 1* 12V/1A Power Adapter
- 1* CAT5 UTP Cable
- 1* QIG
- 1* CD (User's Manual)
- 2* 5dBi 2.4GHz Dipole Antennas

ECB3500 is a powerful, enhanced, enterprise level product supports 7 multi-functions to operate for every kind of working environment.

It supports high transmit output power and high data rate which plays different roles of Access Point/ Client Bridge / Repeater / WDS AP / WDS Bridge / Client Router / AP Router. It operates seamlessly in the 2.4 GHz frequency spectrum supporting the 802.11b (2.4GHz, 11Mbps) and super high speed of 802.11g (2.4GHz, 108Mbps) wireless standards. It supports different output power level settings, bandwidth selection, and RSSI indicator which enables the best transmitting and receiving signal for traffic communication.

For more sensitive security requirements, ECB3500 can encrypt all wireless transmissions through WEP data encryption and WPA/WPA2. ECB3500 also supports IEEE 802.1x Supplicant function in CB mode, and authenticator in AP mode. Those are the enhanced securities in AP/CB mode. The MAC address filter lets you select any stations should have access to your network. The User isolation function could protect the private network between client users. Normally, ECB3500 has mighty security function for your network safety.

Features

Features	Benefits
Super G solution up to 108Mbps	Capable of handling heavy data payloads such as MPEG, video streaming, large file transfer and VoIP
Total EIRP up to 2000mW	Extended excellent Range and Coverage (fewer APs)
IEEE 802.11b/g Compliant	Fully Interoperable with IEEE 802.11b/IEEE802.11g compliant devices
7+1 Multi Functions	Access Point/Client Bridge/Repeater/WDS AP/ WDS

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	Bridge/Client Router/AP Router
Point-to-multipoint Wireless connectivity	Let users transfer data between two buildings or multiple buildings
WDS (Wireless Distributed System)	Make wireless AP and Bridge mode simultaneously as a wireless repeater
Repeater	The easiest way to expand your wireless networking coverage
Support Multi-SSID function (4 SSID) in AP mode (BSSID)	Allow clients to access different networks through a single access point and assign different policies and functions for each SSID by manager
Antenna diversity support	Enhance the traffic signal
WPA2/WPA/ IEEE 802.1x support	Powerful data security
MAC address filtering in AP mode(up to 50)	Ensure the security of network connections
User isolation support (AP mode)	Protect the private network between client users.
PPPoE function support (CR mode)	Easy to access internet via ISP service authentication
Power-over-Ethernet (IEEE802.3af)	Power supply via Ethernet cable which makes the setup more flexible avoids restricting from wiring lines.

Technical Specifications

Hardware Specification

Memory	32MB SDRAM
Flash	8MB
Expansion Slots	N/A
Physical Interface	- LAN: One 10/100 Fast Ethernet RJ-45 - Reset Button - Power Jack
LEDs Status	- Power/ Status - LAN (10/100Mbps) - WLAN (Wireless Connection)
Power Requirements	- Power Supply: 90 to 240 VDC ± 10%, 50/60 Hz (depends on different countries) - Active Ethernet (Power over Ethernet, IEEE802.3af)- 48 VDC/0.375A - Device: 12V/1A

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Regulation Certifications	FCC Part 15, CE

RF Specification		
Frequency Band	2.400～2.484 GHz	
Media Access Protocol	Carrier sense multiple access with collision avoidance (CSMA/CA)	
Modulation Technology	OFDM: BPSK, QPSK, 16-QAM, 64-QAM DBPSK, DQPSK, CCK	
Operating Channels	11 for North America, 14 for Japan, 13 for Europe	
Receive Sensitivity (Typical)	IEEE802.11g	IEEE802.11b
	6Mbps@ -92dBm	1Mbps@ -97dBm
	54Mbps@ -74dBm	11Mbps@ -89dBm
Available transmit power (The Max. Power will be different depending on local regulations)	IEEE802.11g	IEEE802.11b
	26dBm@6~24 Mbps 25dBm@36 Mbps 23dBm@48 Mbps 22dBm@54Mbps	27dBm@1 ~ 11Mbps
Antenna *2	Detachable omni antenna TNC type; Peak Gain = 5dBi (Reverse)	

Antenna Specification

Electrical Properties	Impedance	50 ohm
	Frequency Range	0~6 GHz
	V.S.W.R	1.5 (Max.)
	Working Voltage	≦500 Vrms
	Dielectric Withstanding Voltage	≦1500 Vrms
	Insulation Resistance	≧5000 Megohms
	Contact Resistance	Center contact: 1.5 Milliohms (Max.) Outer contact: 0.2 Milliohms (Max.)

Antenna Radiation Patterns	

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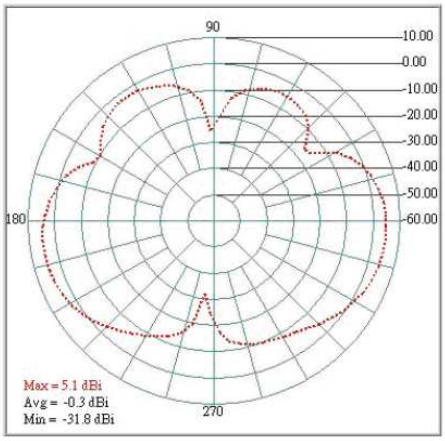
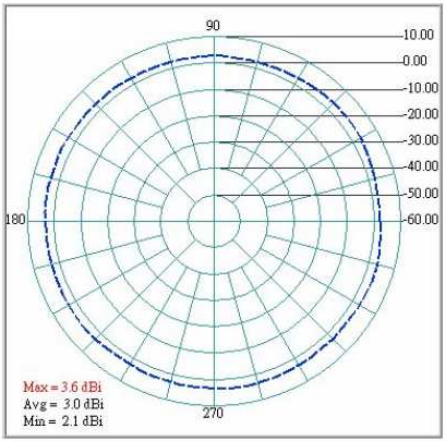


E-Plan 2.4GHz



H-Plan 2.4GHz

Software Features	
Setting	
Topology	Infrastructure
Operation Mode	Access Point/Client Bridge/Repeater/WDS AP/ WDS Bridge/Client Router/AP Router
LAN	- DHCP Server - DHCP Client
WAN (Client Router /AP Router mode)	PPPoE
Router	NAT/ NAPT
VPN	VPN pass-through (PPTP, L2TP, IPSEC)
Wireless	- Wireless Mode – 11b / 11g / Super G - Channel Selection (Setting varies by Country) - Transmission Rate - 11 b/g: 108, 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 in Mbps - Transmit output power control - Signal Strength
Security	- WEP Encryption-64/128/152 bit - WPA Personal (WPA-PSK using TKIP or AES) - WPA Enterprise (WPA-EAP using TKIP) - 802.1x Authenticator (AP mode) - 802.1x Supplicant- TTLS (CB mode) - Hide SSID in beacons

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	- Multiple SSID with 802.1q VLAN tagging (up to 4 SSIDs)(AP mode) - MAC Filter(AP mode) - L2 isolation(AP mode) - Wireless STA (Client) connected list - Lock to AP MAC (CB mode)
QoS	WMM
Management	
Configuration	Web-based configuration (HTTP)/Telnet
Firmware Upgrade	Upgrade firmware via web-browser Keep latest setting when f/w update
Administrator Setting	Administrator password change
Reset Setting	Reboot (press 1 second) Reset to Factory Default (press 5 seconds)
System monitoring	Status, Statistics and Event Log
SNMP	V1, V2c
MIB	MIB I, MIB II
Backup & Restore	Settings through Web

Environment & Mechanical	
Temperature Range	Operating: 0°C to 45°C (32°F to 113°F) Storage: -20°C to 70°C (-4°F to 158°F)
Humidity (non-condensing)	5%～95% typical
Dimensions	125mm (L) x 108mm (W) x 31mm (H)
Weight	350g